

INTERSECTION 50

Crenshaw Boulevard/Lomita Boulevard Improvement(s)

Forecast Near-Term Conditions Intersection LOS Summary

	Weekday AM Peak Hour	Weekday Mid-Day Peak Hour	Weekday PM Peak Hour	Weekend Mid-Day Peak Hour
Without Improvement(s)	44.8 – D	45.0 – D	84.4 – F	37.7 – D
With Improvement(s)	42.5 – D	42.5 – D	54.0 – D	35.6 – D

Note: Delay shown in seconds per vehicle; Deficient intersection operation shown in ***bold italics***.

Recommended Improvements:

- Modify the northbound Crenshaw Boulevard approach from one left-turn lane, three through lanes, and one right-turn lane to consist of one left-turn lane, three through lanes, and one free right-turn lane with acceleration lane on Lomita Boulevard.
- Widen the southbound Crenshaw Boulevard approach from one left-turn lane, three through lanes and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane.
- Widen the eastbound Lomita Boulevard approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane.
- Implementation of the improvements identified at the Crenshaw Boulevard/Lomita Boulevard intersection will require City acquisition of approximately 12-feet of right-of-way on the northbound Crenshaw Boulevard approach for construction of the free-right channelization and approximately 24-feet of right-of-way on the eastbound Lomita Boulevard departure leaving the intersection to provide the eastbound acceleration lane and adequate alignment of eastbound Lomita Boulevard.
- Additionally, implementation of the improvements identified at the Crenshaw Boulevard/Lomita Boulevard intersection will require City acquisition of approximately 12-feet of right-of-way on the southbound Lomita Boulevard approach and departure to provide adequate alignment of southbound Crenshaw Boulevard through lanes.

**CITY OF TORRANCE CITYWIDE TRAFFIC ANALYSIS MITIGATION MEASURES
PRELIMINARY COST ESTIMATES**

Location: Intersection 50: Crenshaw Blvd/Lomita Blvd

Date: 3/21/2008

Mitigation: Modify the NB Crenshaw Blvd approach to consist of one left-turn lane, three through lanes and one free right-turn lane with an acceleration lane on Lomita Blvd. Widen the SB Crenshaw Blvd approach to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen EB Lomita Blvd to two left-turn lanes, three through lanes, and one right-turn lane.

Estimated by: D. Chanley

	DESCRIPTION OF WORK	UNIT PRICE	QUANTITY	COST
1	Mobilization	10.00% (\$2,000 Min)		\$283,000
2	Clear & Grub	\$10,000.00 / AC		\$0
3	Remove Striping	\$10.00 / LF	2,260	\$23,000
4	Remove Curb & Gutter	\$15.00 / LF	2,600	\$39,000
5	Remove Median Curb	\$30.00 / LF		\$0
6	Remove PCC Sidewalk	\$3.50 / SF	21,215	\$74,000
7	Remove Pavement	\$4.00 / SF		\$0
8	Remove Wall	\$50.00 / LF	525	\$26,000
9	Remove Channel	\$15.00 / LF		\$0
10	Remove/Replace Fence	\$50.00 / LF	130	\$7,000
11	Remove/Replace Wrought Iron Fence	\$10.00 / LF	190	\$2,000
12	Remove/Replace Survey Monument	\$800.00 / EA	1	\$1,000
13	Reconstruct Metal Beam Guard Rail	\$70.00 / LF		\$0
14	Remove & Relocate Tree	\$3,000.00 / EA	17	\$51,000
15	Sawcut	\$1.00 / LF	2,600	\$2,600
16	Relocate Street Light	\$7,500.00 / EA	13	\$97,500
17	Relocate Traffic Signal System	\$300,000.00 / EA	0.75	\$225,000
18	Signal Phase Modification	\$10,000.00 / EA		\$0
19	Relocate Freeway Sign (2 post)	\$1,000.00 / EA		\$0
20	Relocate Sign (1 Post)	\$300.00 / EA	19	\$5,700
21	Reconstruct Overhead Sign	\$50,000.00 / EA		\$0
22	Relocate Call Box	\$2,000.00 / EA		\$0
23	Relocate Power Pole	\$25,000.00 / EA	9	\$225,000
24	Relocate Catch Basin	\$9,000.00 / EA	1	\$9,000
25	Relocate Fire Hydrant	\$2,500.00 / EA	5	\$12,500
26	Relocate Bus Shelter	\$2,000.00 / EA	2	\$4,000
27	Relocate Bus Bench	\$600.00 / EA	1	\$1,000
28	Relocate Monument Sign	\$5,000.00 / EA	4	\$20,000
29	Relocate Utility Boxes	\$500.00 / EA		\$0
30	Relocate Main Water Valve	\$10,000.00 / EA		\$0
31	Relocate Utility Vault	\$3,000.00 / EA	29	\$87,000
32	Adjust Manhole to Grade	\$1,000.00 / EA	8	\$8,000
33	Adjust Water Meter	\$2,000.00 / EA	8	\$16,000
34	Adjust Water Valve	\$500.00 / EA	6	\$3,000
35	Adjust Minor Above Ground Utilities	\$500.00 / EA	3	\$2,000
36	Modify Driveway	\$5,000.00 / EA	6	\$30,000
37	Earthwork	\$40.00 / CY	5,040	\$202,000
38	Construct PCC Pavement	\$15.00 / SF		\$0
39	Construct AC Pavement	\$14.00 / SF	27,215	\$381,000
40	Construct AC Overlay	\$3.00 / SF		\$0
41	Construct Slurry Seal	\$0.25 / SF		\$0
42	Construct Striping & Marking	\$4.00 / LF	2,260	\$9,000
43	Construct AC Dike	\$7.00 / LF		\$0
44	Construct Curb & Gutter	\$40.00 / LF	2,910	\$116,000
45	Construct Concrete Barrier	\$50.00 / LF		\$0
46	Construct Median Curb	\$20.00 / LF	190	\$4,000
47	Construct Median Concrete	\$10.00 / SF	1,795	\$18,000
48	Construct Median/Parkway Landscaping	\$10.00 / SF		\$0
49	Construct PCC Sidewalk	\$10.00 / SF	13,125	\$131,000
50	Construct Access Ramp	\$5,000.00 / EA	8	\$40,000
51	Construct Retaining Wall	\$50.00 / SF		\$0
52	Construct Storm Drain Main	\$100.00 / LF		\$0
53	Construct RCB	\$1,000.00 / LF		\$0
54	Construct Headwall	\$5,000.00 / EA		\$0
55	Construct Concrete V-Ditch	\$15.00 / LF		\$0
56	Construct Bridge Widening	\$500.00 / SF		\$0
57	Construct Wall	\$70.00 / LF	525	\$37,000
58	Building/Structure Demolition (1-Story Bldg)	\$10.00 / SF	11,300	\$113,000
59	Traffic Control (\$5,000 min)	8%	1	\$162,000
60	Drainage Items	10%	1	\$218,000
61	SWPPP Plan and Implementation	6%	1	\$143,000
	CONSTRUCTION SUBTOTAL			\$2,828,300
	Right-of-Way	100 / SF	16,527	\$1,653,000
	Right-of-Way Management	5 / %		\$83,000
	RIGHT-OF-WAY SUBTOTAL			\$1,736,000
	TOTAL CONSTRUCTION & RIGHT-OF-WAY COST			\$4,565,000
	Preliminary Project Development (10% of total Construction/RW cost)			\$457,000
	Design Engineering/Administration Costs (15% of total Construction/RW cost) (\$10,000 min)			\$685,000
	Construction Engineering Costs/Administration (10% of total Construction/RW cost) (\$5,000 min)			\$457,000
	Contingency (20% of Total Construction/RW cost) (\$5,000 min)			\$913,000
	TOTAL PROJECT COSTS			\$7,077,000